AMENDMENTS TO THE CLAIMS

1. (Canceled)

2. (Currently amended) An oscillator circuit, comprising:

a variable current source that is arranged to provide a reference current, wherein the reference current is dependent on at least one of temperature and a supply voltage;

a current mirror that is coupled to the variable current source and operable to mirror the reference current across a resistive element to produce a reference voltage, wherein a value of the resistive element is relatively independent of temperature;

a switch circuit that is coupled between the current mirror and a capacitive circuit, wherein the switch circuit is operable to periodically charge and discharge the capacitive circuit; and

a switch control circuit that is coupled to the reference voltage and coupled to the capacitive circuit, wherein the periodic charging and discharging of the capacitive circuit is employed by the switch control circuit to provide an oscillating output signal that is relatively independent of a change in temperature and a change in the supply voltage~~The oscillator circuit of Claim 1~~, wherein the switch circuit further comprises a switch element that is coupled between the capacitive circuit and the current mirror and another switch element that is coupled between the capacitive circuit and ground.

3. (Currently amended) An oscillator circuit, comprising:

a variable current source that is arranged to provide a reference current, wherein the reference current is dependent on at least one of temperature and a supply voltage;

a current mirror that is coupled to the variable current source and operable to mirror the reference current across a resistive element to produce a reference voltage, wherein a value of the resistive element is relatively independent of temperature;

a switch circuit that is coupled between the current mirror and a capacitive circuit, wherein the switch circuit is operable to periodically charge and discharge the capacitive circuit; and

a switch control circuit that is coupled to the reference voltage and coupled to the capacitive circuit, wherein the periodic charging and discharging of the capacitive circuit is employed by the switch control circuit to provide an oscillating output signal that is relatively independent of a change in temperature and a change in the supply voltage~~The oscillator circuit of Claim 1~~, wherein the capacitive circuit further comprises a first capacitive element and a second capacitive element, wherein the first capacitive element is periodically charged and then discharged while a second capacitive element is periodically discharged and then charged by the switch circuit.

4. (Original) The oscillator circuit of Claim 3, wherein a value of the first capacitive element is relatively equivalent to a value of the second capacitive element.

5. (Original) The oscillator of Claim 3, wherein a value of the first capacitive element is relatively dissimilar to a value of the second capacitive element.

6. (Original) The oscillator of Claim 3, wherein the switch control circuit further comprises a comparator that includes an input coupled to the reference voltage, wherein the first capacitive element is coupled to another input of the comparator and the second capacitive element is coupled to another input of the comparator.

7. (Original) The oscillator circuit of Claim 3, wherein the switch control circuit further comprises a first comparator and a second comparator, wherein the reference voltage is coupled to an input of the first comparator and an input of the second comparator, and wherein the first capacitive element is coupled to another input of the first comparator and the second capacitive element is coupled to another input of the second comparator.

8. (Currently amended) An oscillator circuit, comprising:

a variable current source that is arranged to provide a reference current, wherein the reference current is dependent on at least one of temperature and a supply voltage;

a current mirror that is coupled to the variable current source and operable to mirror the reference current across a resistive element to produce a reference voltage, wherein a value of the resistive element is relatively independent of temperature;

a switch circuit that is coupled between the current mirror and a capacitive circuit, wherein the switch circuit is operable to periodically charge and discharge the capacitive circuit; and

a switch control circuit that is coupled to the reference voltage and coupled to the capacitive circuit, wherein the periodic charging and discharging of the capacitive circuit is employed by the switch control circuit to provide an oscillating output signal that is relatively independent of a change in temperature and a change in the supply voltage~~The oscillator circuit of Claim 1~~, wherein the switch control circuit further comprises a latch.

9. (Currently amended) An oscillator circuit, comprising:

a variable current source that is arranged to provide a reference current, wherein the reference current is dependent on at least one of temperature and a supply voltage;

a current mirror that is coupled to the variable current source and operable to mirror the reference current across a resistive element to produce a reference voltage, wherein a value of the resistive element is relatively independent of temperature;

a switch circuit that is coupled between the current mirror and a capacitive circuit, wherein the switch circuit is operable to periodically charge and discharge the capacitive circuit; and

a switch control circuit that is coupled to the reference voltage and coupled to the capacitive circuit, wherein the periodic charging and discharging of the capacitive circuit is employed by the switch control circuit to provide an oscillating output signal that is relatively

independent of a change in temperature and a change in the supply voltage~~The oscillator circuit of Claim 1~~, wherein the switch control circuit further comprises a flip-flop.

10. (Currently amended) An oscillator circuit, comprising:

a variable current source that is arranged to provide a reference current, wherein the reference current is dependent on at least one of temperature and a supply voltage;

a current mirror that is coupled to the variable current source and operable to mirror the reference current across a resistive element to produce a reference voltage, wherein a value of the resistive element is relatively independent of temperature;

a switch circuit that is coupled between the current mirror and a capacitive circuit, wherein the switch circuit is operable to periodically charge and discharge the capacitive circuit; and

a switch control circuit that is coupled to the reference voltage and coupled to the capacitive circuit, wherein the periodic charging and discharging of the capacitive circuit is employed by the switch control circuit to provide an oscillating output signal that is relatively independent of a change in temperature and a change in the supply voltage~~The oscillator circuit of Claim 1~~, wherein a capacitive element is coupled between ground and the reference voltage coupled to the switch control circuit.

11. (Currently amended) An oscillator circuit, comprising:

a variable current source that is arranged to provide a reference current, wherein the reference current is dependent on at least one of temperature and a supply voltage;

a current mirror that is coupled to the variable current source and operable to mirror the reference current across a resistive element to produce a reference voltage, wherein a value of the resistive element is relatively independent of temperature;

a switch circuit that is coupled between the current mirror and a capacitive circuit, wherein the switch circuit is operable to periodically charge and discharge the capacitive circuit; and

a switch control circuit that is coupled to the reference voltage and coupled to the capacitive circuit, wherein the periodic charging and discharging of the capacitive circuit is employed by the switch control circuit to provide an oscillating output signal that is relatively independent of a change in temperature and a change in the supply voltage~~The oscillator circuit of Claim 1~~, wherein the oscillating output signal further comprises a frequency that is determined at least in part by a combination of a value of the resistive element and a value of the capacitive circuit.

12. (Currently amended) An oscillator circuit, comprising:

a variable current source that is arranged to provide a reference current, wherein the reference current is dependent on at least one of temperature and a supply voltage;

a current mirror that is coupled to the variable current source and operable to mirror the reference current across a resistive element to produce a reference voltage, wherein a value of the resistive element is relatively independent of temperature;

a switch circuit that is coupled between the current mirror and a capacitive circuit, wherein the switch circuit is operable to periodically charge and discharge the capacitive circuit; and

a switch control circuit that is coupled to the reference voltage and coupled to the capacitive circuit, wherein the periodic charging and discharging of the capacitive circuit is employed by the switch control circuit to provide an oscillating output signal that is relatively independent of a change in temperature and a change in the supply voltage~~The oscillator circuit of Claim 1~~, wherein the resistive element includes at least a relatively high resistance poly-silicon element with a temperature coefficient that is relatively equivalent to about zero.

13. (Currently amended) An oscillator circuit, comprising:

a variable current source that is arranged to provide a reference current, wherein the reference current is dependent on at least one of temperature and a supply voltage;

a current mirror that is coupled to the variable current source and operable to mirror the reference current across a resistive element to produce a reference voltage, wherein a value of the resistive element is relatively independent of temperature;

a switch circuit that is coupled between the current mirror and a capacitive circuit, wherein the switch circuit is operable to periodically charge and discharge the capacitive circuit; and

a switch control circuit that is coupled to the reference voltage and coupled to the capacitive circuit, wherein the periodic charging and discharging of the capacitive circuit is employed by the switch control circuit to provide an oscillating output signal that is relatively independent of a change in temperature and a change in the supply voltage~~The oscillator circuit of Claim 1~~, wherein the resistive element includes at least one resistor with a positive temperature coefficient and another resistor with a negative temperature coefficient, wherein a combined value for the positive temperature coefficient and the negative temperature coefficient is relatively equivalent to about zero.

14. (Currently amended) An oscillator circuit, comprising:

a variable current source that is arranged to provide a reference current, wherein the reference current is dependent on at least one of temperature and a supply voltage;

a current mirror that is coupled to the variable current source and operable to mirror the reference current across a resistive element to produce a reference voltage, wherein a value of the resistive element is relatively independent of temperature;

a switch circuit that is coupled between the current mirror and a capacitive circuit, wherein the switch circuit is operable to periodically charge and discharge the capacitive circuit; and

a switch control circuit that is coupled to the reference voltage and coupled to the capacitive circuit, wherein the periodic charging and discharging of the capacitive circuit is employed by the switch control circuit to provide an oscillating output signal that is relatively independent of a change in temperature and a change in the supply voltage~~The oscillator circuit of~~

~~Claim 1~~, wherein the reference current is arranged to vary from about 1.7 microamps to 2.3 microamps over a supply voltage range of about 2.2 volts to 6.0 volts.

15. (Currently amended) An oscillator circuit, comprising:

a variable current source that is arranged to provide a reference current, wherein the reference current is dependent on at least one of temperature and a supply voltage;

a current mirror that is coupled to the variable current source and operable to mirror the reference current across a resistive element to produce a reference voltage, wherein a value of the resistive element is relatively independent of temperature;

a switch circuit that is coupled between the current mirror and a capacitive circuit, wherein the switch circuit is operable to periodically charge and discharge the capacitive circuit; and

a switch control circuit that is coupled to the reference voltage and coupled to the capacitive circuit, wherein the periodic charging and discharging of the capacitive circuit is employed by the switch control circuit to provide an oscillating output signal that is relatively independent of a change in temperature and a change in the supply voltage~~The oscillator circuit of Claim 1~~, wherein the switch control circuit further comprises a comparator for comparing the reference voltage to a voltage associated with the capacitive circuit, wherein the comparator operates in about one percent of a period that the capacitive circuit oscillates between charged and discharged.

Claims 16-17 (Canceled)

18. (New) An oscillator circuit, comprising:

a current mirror having at least an input, a first output, and a second output, wherein the second output of the current mirror is coupled to a resistor node;

a first switch circuit that is coupled between the first output of the current mirror and a capacitor node, wherein the oscillator circuit is arranged for operation with a capacitor coupled

between the capacitor node and a ground node, and further arranged for operation with a temperature-independent resistor coupled to the resistor node;

a second switch circuit that is coupled between the capacitor node and the ground node; and

a switch control circuit including a comparator, wherein the comparator has at least a first input, a second input, and an output; the comparator is operable to provide a comparator output signal at the output of the comparator based on a comparison of a voltage at the capacitor node with a voltage at the resistor node; the first input of the comparator is coupled to the capacitor node; the second input of the comparator is coupled to the resistor node; the switch control circuit is operable to control opening and closing of the first switch circuit and the second switch circuit; and wherein switch control circuit is operable to provide an oscillator output signal based, at least in part, on the comparator output signal.

19. (New) The oscillator circuit of Claim 18, further comprising:

a third switch circuit that is coupled between a third output of the current mirror and a second capacitor node, wherein the oscillator circuit is further arranged for operation with a second capacitor coupled between the second capacitor node and the ground node; and

a fourth switch circuit that is coupled between the second capacitor node and the ground node, wherein the switch control circuit further includes:

a second comparator, wherein the second comparator has at least a first input, a second input, and an output; the second comparator is operable to provide a second comparator output signal at the output of the second comparator; the first input of the second comparator is coupled to the second capacitor node; the second input of the second comparator is coupled to the resistor node; and wherein the switch control circuit is further operable to control opening and closing of the third switch circuit and the fourth switch circuit; and

a latch that is coupled to the output of the first comparator and the output of the second comparator, wherein the latch is operable to provide the oscillator output signal based on the first comparator output signal and the second comparator output signal.